ELSEVIER

Journal of Nuclear Materials 224 (1995) 323–325

journal of nuclear materials

Author index

Abe, T., see Hiroki, S. 224 (1995) 293
Alessandrini, F., C. Alvani, S. Casadio, M.R. Mancini and C.A. Nannetti, In-situ tritium release (CORELLI-2 experiment) and ex-reactor ionic conductivity of substoichiometric $LiAlO_2$ breeder ceramics 224 (1995) 236
Altunoglu, A.K. and N.St.J. Braithwaite, Modelling of modulated gas flow through solid membranes under surface limited conditions 224 (1995) 273
Alvani, C., see Alessandrini, F. 224 (1995) 236
Ananthasivan, K., see Asuvathraman, R. 224 (1995) 25
Asuvathraman, R., S. Rajagopalan, K. Ananthasivan, C.K. Mathews and R.M. Mallya, Surface studies on uranium monocarbide using XPS and SIMS 224 (1995) 25

Banerjee, S., see Dey, G.K. 224 (1995) 146
Baretzky, B., W. Eckstein and R.P. Schorn, Cu/Li alloys: Conditions for their application in fusion reactors – focussing on the interaction of segregation and sputtering phenomena 224 (1995) 50
Bibilashvily, Yu.K., Yu.N. Dolgov, B.I. Nesterov and V.V. Novikov, Propagation of stress corrosion cracks in Zr–1% Nb claddings 224 (1995) 307
Blackford, M.G., see Lumpkin, G.R. 224 (1995) 31
Braithwaite, N.St.J., see Altunoglu, A.K. 224 (1995) 273
Burchell, T.D., see Snead, L.L. 224 (1995) 222
Burke, M.G., see Foster, J.P. 224 (1995) 207

Casadio, S., see Alessandrini, F. 224 (1995) 236
Chun, S.S., see In, C.B. 224 (1995) 71
Chung, H.S., see Hur, D.H. 224 (1995) 179
Chunhe, T. and G. Jie, Improvement in oxidation resistance of the nuclear graphite by reaction-coated SiC coating 224 (1995) 103
Cox, B. and C. Wu, Transient effects of lithium hydroxide and boric acid on Zircaloy corrosion 224 (1995) 169
Cox, B., Comments on "A theory of the resistance of Zircaloy to uniform corrosion" by B. Hutchinson and B. Lehtinen, J. Nucl. Mater. 217 (1994) 243–249 224 (1995) 192
Craciunescu, T., C. Niculae, G. Mateescu and C. Turcanu, A comparison of four tomographic methods for nuclear fuel pin analysis 224 (1995) 199

Davis, J.W., see Haasz, A.A. 224 (1995) 141
Davis, J.W., see Enweani, B.N. 224 (1995) 245
Dey, G.K., R.N. Singh, R. Tewari, D. Srivastava and S. Banerjee, Metastability of the β-phase in Zr-rich Zr–Nb alloys 224 (1995) 146
Dolgov, Yu.N., see Bibilashvily, Yu.K. 224 (1995) 307

Eckstein, W., see Baretzky, B. 224 (1995) 50
Edwards, D.J., see Singh, B.N. 224 (1995) 131
Enweani, B.N., J.W. Davis and A.A. Haasz, Thermal diffusivity/conductivity of doped graphites 224 (1995) 245
Evtikhin, V.A., see Lyublinski, I.E. 224 (1995) 288

Fisher, J.H., see Hollerman, W.A. 224 (1995) 314
Foster, C.C., see Hollerman, W.A. 224 (1995) 314
Foster, J.P., D.L. Porter, D.L. Harrod, T.R. Mager and M.G. Burke, 316 stainless steel cavity swelling in a PWR 224 (1995) 207
Fukuda, K., see Minato, K. 224 (1995) 85

García, E.A., Dynamical diffusion model to simulate the oxide crystallization and grain growth during oxidation of zirconium at 573 and 623 K 224 (1995) 299
Gnanamoorthy, J.B., see Rajendran Pillai, S. 224 (1995) 17
Gurevitz, Y., see Munitz, A. 224 (1995) 187

Haasz, A.A. and J.W. Davis, Flux dependence of the radiation-enhanced sublimation of graphite due to D^+ irradiation 224 (1995) 141
Haasz, A.A., see Enweani, B.N. 224 (1995) 245
Harrod, D.L., see Foster, J.P. 224 (1995) 207
Hasegawa, S., see Ikeda, Y. 224 (1995) 266
Hasegawa, Y., see Hiroki, S. 224 (1995) 293
Hashimoto, N., see Watanabe, S. 224 (1995) 158
Hayashi, H., see Yanai, K. 224 (1995) 79
Hensel, W. and E. Hoinkis, The diffusion of cesium in the graphitic matrix A3–3 in the presence of helium at pressures up to 10^7 Pa 224 (1995) 1
Hensel, W. and E. Hoinkis, The diffusion of cesium in the graphitic matrix A3-3 under irradiation by a fast neutron flux of 2×10^{17} m^{-2} s^{-1} 224 (1995) 230
Hiroki, S., Y. Hasegawa, K. Kaneko, T. Abe and Y. Murakami, High-resolution mass spectrometric analysis of gases released

from graphite during sequential helium and deuterium glow discharge cleanings 224 (1995) 293
Hodgson, E.R., see Moroño, A. 224 (1995) 216
Hoinkis, E., see Hensel, W. 224 (1995) 1
Hoinkis, E., see Hensel, W. 224 (1995) 230
Holland, L.R., see Hollerman, W.A. 224 (1995) 314
Hollerman, W.A., G.M. Jenkins, J.H. Fisher, L.R. Holland, E.K. Williams, H. Maleki and C.C. Foster, Temperature dependent fluorescence from Gd_2O_2S:Tb induced by 45 MeV proton irradiation 224 (1995) 314
Horsewell, A., see Singh, B.N. 224 (1995) 131
Hur, D.H., H.S. Chung and U.C. Kim, Corrosion behaviors during the iron removal process for chemical cleaning of nuclear steam generators 224 (1995) 179
Hutchinson, B. and B. Lehtinen, Authors' reply to Comments on "A theory of the resistance of Zircaloy to uniform corrosion" 224 (1995) 195

Ikeda, Y., Y. Yasuike, K. Nishimura, S. Hasegawa and Y. Takashima, Kinetic study on dissolution of UO_2 powders in nitric acid 224 (1995) 266
Iltis, X., F. Lefebvre and C. Lemaignan, Microstructural study of oxide layers formed on Zircaloy-4 in autoclave and in reactor. Part I: Impact of irradiation on the microstructure of the zirconia layer 224 (1995) 109
Iltis, X., F. Lefebvre and C. Lemaignan, Microstructural study of oxide layers formed on Zircaloy-4 in autoclave and in reactor. Part II: Impact of the chemical evolution of intermetallic precipitates on their zirconia environment 224 (1995) 121
In, C.B., Y.I. Kim, W.W. Kim, J.S. Kim, S.S. Chun and W.J. Lee, Pitting resistance and mechanism of TiN-coated Inconel 600 in 100° C NaCl solution 224 (1995) 71
Ishikawa, T., see Yanai, K. 224 (1995) 79
Ishimoto, S., see Yanai, K. 224 (1995) 79
Ito, K., see Yanai, K. 224 (1995) 79

Jenkins, G.M., see Hollerman, W.A. 224 (1995) 314
Jie, G., see Chunhe, T. 224 (1995) 103
Jurcik, B., see Kuga, Y. 224 (1995) 43

Kaneko, K., see Hiroki, S. 224 (1995) 293
Khatak, H.S., see Rajendran Pillai, S. 224 (1995) 17
Kim, J.S., see In, C.B. 224 (1995) 71
Kim, U.C., see Hur, D.H. 224 (1995) 179
Kim, W.W., see In, C.B. 224 (1995) 71
Kim, Y.I., see In, C.B. 224 (1995) 71
Krasin, V.P., see Lyublinski, I.E. 224 (1995) 288
Kubo, T., see Yanai, K. 224 (1995) 79
Kuga, Y., B. Jurcik, S. Satooka and K. Takeuchi, Improvement of multi-jet low pressure impactor for high collection efficiency of UF_5 in the molecular laser isotope separation of uranium 224 (1995) 43

Lee, W.J., see In, C.B. 224 (1995) 71
Lefebvre, F., see Iltis, X. 224 (1995) 109
Lefebvre, F., see Iltis, X. 224 (1995) 121
Lehtinen, B., see Hutchinson, B. 224 (1995) 195
Lemaignan, C., see Iltis, X. 224 (1995) 109
Lemaignan, C., see Iltis, X. 224 (1995) 121
Lumpkin, G.R., K.L. Smith and M.G. Blackford, Partitioning of uranium and rare earth elements in Synroc: effect of impurities, metal additive, and waste loading 224 (1995) 31
Lyublinski, I.E., V.A. Evtikhin, V.Yu. Pankratov and V.P. Krasin, Numerical and experimental determination of metallic solubilities in liquid lithium, lithium-containing nonmetallic impurities, lead and lead–lithium eutectic 224 (1995) 288

Mager, T.R., see Foster, J.P. 224 (1995) 207
Maleki, H., see Hollerman, W.A. 224 (1995) 314
Mallya, R.M., see Asuvathraman, R. 224 (1995) 25
Mancini, M.R., see Alessandrini, F. 224 (1995) 236
Mateescu, G., see Craciunescu, T. 224 (1995) 199
Mathews, C.K., see Asuvathraman, R. 224 (1995) 25
Minato, K., T. Ogawa, K. Fukuda, H. Nabielek, H. Sekino, Y. Nozawa and I. Takahashi, Fission product release from ZrC-coated fuel particles during postirradiation heating at 1600° C 224 (1995) 85
Moroño, A. and E.R. Hodgson, Radioluminescence problems for diagnostic windows 224 (1995) 216
Munitz, A., Y. Gurevitz and P. Regev, Microhardness measurements of the IRR2 vessel 224 (1995) 187
Murakami, Y., see Hiroki, S. 224 (1995) 293

Nabielek, H., see Minato, K. 224 (1995) 85
Nannetti, C.A., see Alessandrini, F. 224 (1995) 236
Nesterov, B.I., see Bibilashvily, Yu.K. 224 (1995) 307
Niculae, C., see Craciunescu, T. 224 (1995) 199
Nishimura, K., see Ikeda, Y. 224 (1995) 266
Novikov, V.V., see Bibilashvily, Yu.K. 224 (1995) 307
Nozawa, Y., see Minato, K. 224 (1995) 85

Ogawa, T., see Minato, K. 224 (1995) 85
Olander, D.R., Interpretation of laboratory crucible experiments on UO_2 dissolution by liquid zirconium 224 (1995) 254

Pankratov, V.Yu., see Lyublinski, I.E. 224 (1995) 288
Perovic, A., see Perovic, V. 224 (1995) 93
Perovic, V., A. Perovic, G.C. Weatherly and G.R. Purdy, The distribution of Nb and Fe in a Zr–2.5 wt% Nb alloy, before and after irradiation 224 (1995) 93
Porter, D.L., see Foster, J.P. 224 (1995) 207
Purdy, G.R., see Perovic, V. 224 (1995) 93

Rajagopalan, S., see Asuvathraman, R. 224 (1995) 25
Rajendran Pillai, S., H.S. Khatak and J.B. Gnanamoorthy, Formation of $NaCrO_2$ in

sodium systems of fast reactors and its consequence on the carbon potential 224 (1995) 17
Regev, P., see Munitz, A. 224 (1995) 187

Sakaguchi, N., see Watanabe, S. 224 (1995) 158
Satooka, S., see Kuga, Y. 224 (1995) 43
Scholz, R., The effect of hold-times on the fatigue life of 20% cold-worked Type 316L stainless steel under deuteron irradiation 224 (1995) 311
Schorn, R.P., see Baretzky, B. 224 (1995) 50
Sekino, H., see Minato, K. 224 (1995) 85
Singh, B.N., A. Horsewell, P. Toft and D.J. Edwards, Temperature and dose dependencies of microstructure and hardness of neutron irradiated OFHC copper 224 (1995) 131
Singh, R.N., see Dey, G.K. 224 (1995) 146
Smith, K.L., see Lumpkin, G.R. 224 (1995) 31
Snead, L.L. and T.D. Burchell, Thermal conductivity degradation of graphites due to neutron irradiation at low temperature 224 (1995) 222
Srivastava, D., see Dey, G.K. 224 (1995) 146

Takahashi, H., see Watanabe, S. 224 (1995) 158
Takahashi, I., see Minato, K. 224 (1995) 85
Takashima, Y., see Ikeda, Y. 224 (1995) 266
Takeuchi, K., see Kuga, Y. 224 (1995) 43
Tewari, R., see Dey, G.K. 224 (1995) 146
Toft, P., see Singh, B.N. 224 (1995) 131
Trybus, C.L., Injection casting of U–Zr–Mn, surrogate alloy for U–Pu–Zr–Am–Np 224 (1995) 305
Turcanu, C., see Craciunescu, T. 224 (1995) 199

Watanabe, S., N. Sakaguchi, N. Hashimoto and H. Takahashi, Quantitative studies of irradiation-induced segregation and grain boundary migration in Fe–Cr–Ni alloy 224 (1995) 158
Weatherly, G.C., see Perovic, V. 224 (1995) 93
Williams, E.K., see Hollerman, W.A. 224 (1995) 314
Wu, C., see Cox, B. 224 (1995) 169

Xu, S.J., J.G. Zhou, B. Yang and B.Z. Zhang, Effect of deposition temperature on the properties of pyrolytic SiC 224 (1995) 12

Yanai, K., S. Ishimoto, T. Kubo, K. Ito, T. Ishikawa and H. Hayashi, Characterization of ceramic powder compacts 224 (1995) 79
Yang, B., see Xu, S.J. 224 (1995) 12
Yasuike, Y., see Ikeda, Y. 224 (1995) 266

Zhang, B.Z., see Xu, S.J. 224 (1995) 12
Zhou, J.G., see Xu, S.J. 224 (1995) 12

ELSEVIER

Journal of Nuclear Materials 224 (1995) 327–332

journal of nuclear materials

Subject index

Actinides *(excludes Plutonium, Thorium and Uranium)*

Partitioning of uranium and rare earth elements in Synroc: effect of impurities, metal additive, and waste loading, G.R. Lumpkin, K.L. Smith and M.G. Blackford 224 (1995) 31

Injection casting of U–Zr–Mn, surrogate alloy for U–Pu–Zr–Am–Np, C.L. Trybus 224 (1995) 305

Aluminum, Aluminum Alloys and Compounds

Characterization of ceramic powder compacts, K. Yanai, S. Ishimoto, T. Kubo, K. Ito, T. Ishikawa and H. Hayashi 224 (1995) 79

Microhardness measurements of the IRR2 vessel, A. Munitz, Y. Gurevitz and P. Regev 224 (1995) 187

Radioluminescence problems for diagnostic windows, A. Moroño and E.R. Hodgson 224 (1995) 216

Analytical Instruments and Methods

Temperature dependent fluorescence from Gd_2O_2S:Tb induced by 45 MeV proton irradiation, W.A. Hollerman, G.M. Jenkins, J.H. Fisher, L.R. Holland, E.K. Williams, H. Maleki and C.C. Foster 224 (1995) 314

Breeding Materials

In-situ tritium release (CORELLI-2 experiment) and ex-reactor ionic conductivity of substoichiometric $LiAlO_2$ breeder ceramics, F. Alessandrini, C. Alvani, S. Casadio, M.R. Mancini and C.A. Nannetti 224 (1995) 236

Carbon

The diffusion of cesium in the graphitic matrix A3–3 in the presence of helium at pressures up to 10^7 Pa, W. Hensel and E. Hoinkis 224 (1995) 1

Improvement in oxidation resistance of the nuclear graphite by reaction-coated SiC coating, T. Chunhe and G. Jie 224 (1995) 103

Flux dependence of the radiation-enhanced sublimation of graphite due to D^+ irradiation, A.A. Haasz and J.W. Davis 224 (1995) 141

Thermal conductivity degradation of graphites due to neutron irradiation at low temperature, L.L. Snead and T.D. Burchell 224 (1995) 222

The diffusion of cesium in the graphitic matrix A3-3 under irradiation by a fast neutron flux of 2×10^{17} m^{-2} s^{-1}, W. Hensel and E. Hoinkis 224 (1995) 230

Thermal diffusivity/conductivity of doped graphites, B.N. Enweani, J.W. Davis and A.A. Haasz 224 (1995) 245

High-resolution mass spectrometric analysis of gases released from graphite during sequential helium and deuterium glow discharge cleanings, S. Hiroki, Y. Hasegawa, K. Kaneko, T. Abe and Y. Murakami 224 (1995) 293

Ceramics *(not listed elsewhere)*

Partitioning of uranium and rare earth elements in Synroc: effect of impurities, metal additive, and waste loading, G.R. Lumpkin, K.L. Smith and M.G. Blackford 224 (1995) 31

In-situ tritium release (CORELLI-2 experiment) and ex-reactor ionic conductivity of substoichiometric $LiAlO_2$ breeder ceramics, F. Alessandrini, C. Alvani, S. Casadio, M.R. Mancini and C.A. Nannetti 224 (1995) 236

Chemical Reactions *(includes Electrochemical and Thermochemical Reactions)*

Surface studies on uranium monocarbide using XPS and SIMS, R. Asuvathraman, S. Rajagopalan, K. Ananthasivan, C.K. Mathews and R.M. Mallya 224 (1995) 25

Improvement in oxidation resistance of the nuclear graphite by reaction-coated SiC coating, T. Chunhe and G. Jie 224 (1995) 103

Microstructural study of oxide layers formed on Zircaloy-4 in autoclave and in reactor. Part I: Impact of irradiation on the microstructure of the zirconia layer, X. Iltis, F. Lefebvre and C. Lemaignan 224 (1995) 109

Microstructural study of oxide layers formed on Zircaloy-4 in autoclave and in reactor. Part II: Impact of the chemical evolution of intermetallic precipitates on their zirconia environment, X. Iltis, F. Lefebvre and C. Lemaignan 224 (1995) 121

Corrosion behaviors during the iron removal process for chemical cleaning of nuclear steam generators, D.H. Hur, H.S. Chung and U.C. Kim 224 (1995) 179
Comments on "A theory of the resistance of Zircaloy to uniform corrosion" by B. Hutchinson and B. Lehtinen, J. Nucl. Mater. 217 (1994) 243–249, B. Cox 224 (1995) 192
Authors' reply to Comments on "A theory of the resistance of Zircaloy to uniform corrosion", B. Hutchinson and B. Lehtinen 224 (1995) 195
Interpretation of laboratory crucible experiments on UO_2 dissolution by liquid zirconium, D.R. Olander 224 (1995) 254

Cladding Materials
Interpretation of laboratory crucible experiments on UO_2 dissolution by liquid zirconium, D.R. Olander 224 (1995) 254
Propagation of stress corrosion cracks in Zr–1% Nb claddings, Yu.K. Bibilashvily, Yu.N. Dolgov, B.I. Nesterov and V.V. Novikov 224 (1995) 307

Coatings and Coated Particles
Pitting resistance and mechanism of TiN-coated Inconel 600 in 100°C NaCl solution, C.B. In, Y.I. Kim, W.W. Kim, J.S. Kim, S.S. Chun and W.J. Lee 224 (1995) 71
Fission product release from ZrC-coated fuel particles during postirradiation heating at 1600°C, K. Minato, T. Ogawa, K. Fukuda, H. Nabielek, H. Sekino, Y. Nozawa and I. Takahashi 224 (1995) 85
Improvement in oxidation resistance of the nuclear graphite by reaction-coated SiC coating, T. Chunhe and G. Jie 224 (1995) 103

Compatibility and Corrosion *(includes Stress Corrosion Cracking)*
Pitting resistance and mechanism of TiN-coated Inconel 600 in 100°C NaCl solution, C.B. In, Y.I. Kim, W.W. Kim, J.S. Kim, S.S. Chun and W.J. Lee 224 (1995) 71
Transient effects of lithium hydroxide and boric acid on Zircaloy corrosion, B. Cox and C. Wu 224 (1995) 169
Comments on "A theory of the resistance of Zircaloy to uniform corrosion" by B. Hutchinson and B. Lehtinen, J. Nucl. Mater. 217 (1994) 243–249, B. Cox 224 (1995) 192
Authors' reply to Comments on "A theory of the resistance of Zircaloy to uniform corrosion", B. Hutchinson and B. Lehtinen 224 (1995) 195
Propagation of stress corrosion cracks in Zr–1% Nb claddings, Yu.K. Bibilashvily, Yu.N. Dolgov, B.I. Nesterov and V.V. Novikov 224 (1995) 307

Composite Materials
Thermal conductivity degradation of graphites due to neutron irradiation at low temperature, L.L. Snead and T.D. Burchell 224 (1995) 222

Copper, Copper Alloys and Compounds
Cu/Li alloys: Conditions for their application in fusion reactors – focussing on the interaction of segregation and sputtering phenomena, B. Baretzky, W. Eckstein and R.P. Schorn 224 (1995) 50
Temperature and dose dependencies of microstructure and hardness of neutron irradiated OFHC copper, B.N. Singh, A. Horsewell, P. Toft and D.J. Edwards 224 (1995) 131

Diffusion
The diffusion of cesium in the graphitic matrix A3–3 in the presence of helium at pressures up to 10^7 Pa, W. Hensel and E. Hoinkis 224 (1995) 1
The diffusion of cesium in the graphitic matrix A3-3 under irradiation by a fast neutron flux of 2×10^{17} m^{-2} s^{-1}, W. Hensel and E. Hoinkis 224 (1995) 230
Thermal diffusivity/conductivity of doped graphites, B.N. Enweani, J.W. Davis and A.A. Haasz 224 (1995) 245
Modelling of modulated gas flow through solid membranes under surface limited conditions, A.K. Altunoglu and N.St.J. Braithwaite 224 (1995) 273
Dynamical diffusion model to simulate the oxide crystallization and grain growth during oxidation of zirconium at 573 and 623 K, E.A. García 224 (1995) 299

Electron Irradiation
Metastability of the β-phase in Zr-rich Zr–Nb alloys, G.K. Dey, R.N. Singh, R. Tewari, D. Srivastava and S. Banerjee 224 (1995) 146
Quantitative studies of irradiation-induced segregation and grain boundary migration in Fe–Cr–Ni alloy, S. Watanabe, N. Sakaguchi, N. Hashimoto and H. Takahashi 224 (1995) 158
Radioluminescence problems for diagnostic windows, A. Moroño and E.R. Hodgson 224 (1995) 216

Experimental Techniques
Characterization of ceramic powder compacts, K. Yanai, S. Ishimoto, T. Kubo, K. Ito, T. Ishikawa and H. Hayashi 224 (1995) 79

Fabrication
Injection casting of U–Zr–Mn, surrogate alloy for U–Pu–Zr–Am–Np, C.L. Trybus 224 (1995) 305

Fatigue
Propagation of stress corrosion cracks in Zr–1% Nb claddings, Yu.K. Bibilashvily, Yu.N. Dolgov, B.I. Nesterov and V.V. Novikov 224 (1995) 307

The effect of hold-times on the fatigue life of 20% cold-worked Type 316L stainless steel under deuteron irradiation, R. Scholz 224 (1995) 311

First Wall Materials

Cu/Li alloys: Conditions for their application in fusion reactors – focussing on the interaction of segregation and sputtering phenomena, B. Baretzky, W. Eckstein and R.P. Schorn 224 (1995) 50

Fission Products

The diffusion of cesium in the graphitic matrix A3–3 in the presence of helium at pressures up to 10^7 Pa, W. Hensel and E. Hoinkis 224 (1995) 1

Fission product release from ZrC-coated fuel particles during postirradiation heating at 1600°C, K. Minato, T. Ogawa, K. Fukuda, H. Nabielek, H. Sekino, Y. Nozawa and I. Takahashi 224 (1995) 85

A comparison of four tomographic methods for nuclear fuel pin analysis, T. Craciunescu, C. Niculae, G. Mateescu and C. Turcanu 224 (1995) 199

The diffusion of cesium in the graphitic matrix A3-3 under irradiation by a fast neutron flux of 2×10^{17} m^{-2} s^{-1}, W. Hensel and E. Hoinkis 224 (1995) 230

Fracture and Fracture Toughness

Propagation of stress corrosion cracks in Zr–1% Nb claddings, Yu.K. Bibilashvily, Yu.N. Dolgov, B.I. Nesterov and V.V. Novikov 224 (1995) 307

Fuels and Fuel Elements

A comparison of four tomographic methods for nuclear fuel pin analysis, T. Craciunescu, C. Niculae, G. Mateescu and C. Turcanu 224 (1995) 199

Interpretation of laboratory crucible experiments on UO_2 dissolution by liquid zirconium, D.R. Olander 224 (1995) 254

Injection casting of U–Zr–Mn, surrogate alloy for U–Pu–Zr–Am–Np, C.L. Trybus 224 (1995) 305

Fusion Reactors

Modelling of modulated gas flow through solid membranes under surface limited conditions, A.K. Altunoglu and N.St.J. Braithwaite 224 (1995) 273

Growth

Dynamical diffusion model to simulate the oxide crystallization and grain growth during oxidation of zirconium at 573 and 623 K, E.A. García 224 (1995) 299

Heat Treatment

High-resolution mass spectrometric analysis of gases released from graphite during sequential helium and deuterium glow discharge cleanings, S. Hiroki, Y. Hasegawa, K. Kaneko, T. Abe and Y. Murakami 224 (1995) 293

Hydrogen and Hydrides *(includes Deuterium and Deuterides)*

Flux dependence of the radiation-enhanced sublimation of graphite due to D^+ irradiation, A.A. Haasz and J.W. Davis 224 (1995) 141

Modelling of modulated gas flow through solid membranes under surface limited conditions, A.K. Altunoglu and N.St.J. Braithwaite 224 (1995) 273

High-resolution mass spectrometric analysis of gases released from graphite during sequential helium and deuterium glow discharge cleanings, S. Hiroki, Y. Hasegawa, K. Kaneko, T. Abe and Y. Murakami 224 (1995) 293

Impurities

Thermal diffusivity/conductivity of doped graphites, B.N. Enweani, J.W. Davis and A.A. Haasz 224 (1995) 245

Numerical and experimental determination of metallic solubilities in liquid lithium, lithium-containing nonmetallic impurities, lead and lead–lithium eutectic, I.E. Lyublinski, V.A. Evtikhin, V.Yu. Pankratov and V.P. Krasin 224 (1995) 288

Interfaces

Microstructural study of oxide layers formed on Zircaloy-4 in autoclave and in reactor. Part I: Impact of irradiation on the microstructure of the zirconia layer, X. Iltis, F. Lefebvre and C. Lemaignan 224 (1995) 109

Microstructural study of oxide layers formed on Zircaloy-4 in autoclave and in reactor. Part II: Impact of the chemical evolution of intermetallic precipitates on their zirconia environment, X. Iltis, F. Lefebvre and C. Lemaignan 224 (1995) 121

Ion Irradiation

Flux dependence of the radiation-enhanced sublimation of graphite due to D^+ irradiation, A.A. Haasz and J.W. Davis 224 (1995) 141

Temperature dependent fluorescence from Gd_2O_2S:Tb induced by 45 MeV proton irradiation, W.A. Hollerman, G.M. Jenkins, J.H. Fisher, L.R. Holland, E.K. Williams, H. Maleki and C.C. Foster 224 (1995) 314

The effect of hold-times on the fatigue life of 20% cold-worked Type 316L stainless steel under deuteron irradiation, R. Scholz 224 (1995) 311

Iron, Iron Alloys *(excludes Steels)* **and Compounds**
Corrosion behaviors during the iron removal process for chemical cleaning of nuclear steam generators, D.H. Hur, H.S. Chung and U.C. Kim 224 (1995) 179

Laser
Improvement of multi-jet low pressure impactor for high collection efficiency of UF_5 in the molecular laser isotope separation of uranium, Y. Kuga, B. Jurcik, S. Satooka and K. Takeuchi 224 (1995) 43

Liquid Metals
Formation of $NaCrO_2$ in sodium systems of fast reactors and its consequence on the carbon potential, S. Rajendran Pillai, H.S. Khatak and J.B. Gnanamoorthy 224 (1995) 17
Numerical and experimental determination of metallic solubilities in liquid lithium, lithium-containing nonmetallic impurities, lead and lead–lithium eutectic, I.E. Lyublinski, V.A. Evtikhin, V.Yu. Pankratov and V.P. Krasin 224 (1995) 288

Mathematical and Computational Methods
A comparison of four tomographic methods for nuclear fuel pin analysis, T. Craciunescu, C. Niculae, G. Mateescu and C. Turcanu 224 (1995) 199
Dynamical diffusion model to simulate the oxide crystallization and grain growth during oxidation of zirconium at 573 and 623 K, E.A. García 224 (1995) 299

Mechanical Properties *(not listed elsewhere)*
Effect of deposition temperature on the properties of pyrolytic SiC, S.J. Xu, J.G. Zhou, B. Yang and B.Z. Zhang 224 (1995) 12
Temperature and dose dependencies of microstructure and hardness of neutron irradiated OFHC copper, B.N. Singh, A. Horsewell, P. Toft and D.J. Edwards 224 (1995) 131
Microhardness measurements of the IRR2 vessel, A. Munitz, Y. Gurevitz and P. Regev 224 (1995) 187

Neutron Irradiation
The distribution of Nb and Fe in a Zr–2.5 wt% Nb alloy, before and after irradiation, V. Perovic, A. Perovic, G.C. Weatherly and G.R. Purdy 224 (1995) 93
Temperature and dose dependencies of microstructure and hardness of neutron irradiated OFHC copper, B.N. Singh, A. Horsewell, P. Toft and D.J. Edwards 224 (1995) 131
316 stainless steel cavity swelling in a PWR, J.P. Foster, D.L. Porter, D.L. Harrod, T.R. Mager and M.G. Burke 224 (1995) 207
Thermal conductivity degradation of graphites due to neutron irradiation at low temperature, L.L. Snead and T.D. Burchell 224 (1995) 222
The diffusion of cesium in the graphitic matrix A3-3 under irradiation by a fast neutron flux of 2×10^{17} m^{-2} s^{-1}, W. Hensel and E. Hoinkis 224 (1995) 230
In-situ tritium release (CORELLI-2 experiment) and ex-reactor ionic conductivity of substoichiometric $LiAlO_2$ breeder ceramics, F. Alessandrini, C. Alvani, S. Casadio, M.R. Mancini and C.A. Nannetti 224 (1995) 236

Nickel, Nickel Alloys and Compounds
Pitting resistance and mechanism of TiN-coated Inconel 600 in 100°C NaCl solution, C.B. In, Y.I. Kim, W.W. Kim, J.S. Kim, S.S. Chun and W.J. Lee 224 (1995) 71

Optical Microscopy
Microstructural study of oxide layers formed on Zircaloy-4 in autoclave and in reactor. Part I: Impact of irradiation on the microstructure of the zirconia layer, X. Iltis, F. Lefebvre and C. Lemaignan 224 (1995) 109
Microstructural study of oxide layers formed on Zircaloy-4 in autoclave and in reactor. Part II: Impact of the chemical evolution of intermetallic precipitates on their zirconia environment, X. Iltis, F. Lefebvre and C. Lemaignan 224 (1995) 121

Phase Equilibria *(includes Constitution, Phase Stability, Phase Instability)*
The distribution of Nb and Fe in a Zr–2.5 wt% Nb alloy, before and after irradiation, V. Perovic, A. Perovic, G.C. Weatherly and G.R. Purdy 224 (1995) 93

Phase Transformation *(includes Evaporation, Sublimation)*
Metastability of the β-phase in Zr-rich Zr–Nb alloys, G.K. Dey, R.N. Singh, R. Tewari, D. Srivastava and S. Banerjee 224 (1995) 146

Physical Properties *(not listed elsewhere)*
Radioluminescence problems for diagnostic windows, A. Moroño and E.R. Hodgson 224 (1995) 216
Thermal conductivity degradation of graphites due to neutron irradiation at low temperature, L.L. Snead and T.D. Burchell 224 (1995) 222
Temperature dependent fluorescence from Gd_2O_2S:Tb induced by 45 MeV proton irradiation, W.A. Hollerman, G.M. Jenkins, J.H. Fisher, L.R. Holland, E.K. Williams, H. Maleki and C.C. Foster 224 (1995) 314

Plasma–Materials Interaction
Flux dependence of the radiation-enhanced sublimation of graphite due to D^+ irradiation, A.A. Haasz and J.W. Davis 224 (1995) 141

Thermal diffusivity/conductivity of doped graphites, B.N. Enweani, J.W. Davis and A.A. Haasz 224 (1995) 245
High-resolution mass spectrometric analysis of gases released from graphite during sequential helium and deuterium glow discharge cleanings, S. Hiroki, Y. Hasegawa, K. Kaneko, T. Abe and Y. Murakami 224 (1995) 293

Pores *(includes Porosity, Fabrication Pores)*
Transient effects of lithium hydroxide and boric acid on Zircaloy corrosion, B. Cox and C. Wu 224 (1995) 169

Powder Processes and Products
Characterization of ceramic powder compacts, K. Yanai, S. Ishimoto, T. Kubo, K. Ito, T. Ishikawa and H. Hayashi 224 (1995) 79

Processing
Improvement of multi-jet low pressure impactor for high collection efficiency of UF_5 in the molecular laser isotope separation of uranium, Y. Kuga, B. Jurcik, S. Satooka and K. Takeuchi 224 (1995) 43

Radiation Effects: Extended Defects, Microstructures
The distribution of Nb and Fe in a Zr–2.5 wt% Nb alloy, before and after irradiation, V. Perovic, A. Perovic, G.C. Weatherly and G.R. Purdy 224 (1995) 93
Quantitative studies of irradiation-induced segregation and grain boundary migration in Fe–Cr–Ni alloy, S. Watanabe, N. Sakaguchi, N. Hashimoto and H. Takahashi 224 (1995) 158
316 stainless steel cavity swelling in a PWR, J.P. Foster, D.L. Porter, D.L. Harrod, T.R. Mager and M.G. Burke 224 (1995) 207

Radiation Effects: Mechanical Properties
Microhardness measurements of the IRR2 vessel, A. Munitz, Y. Gurevitz and P. Regev 224 (1995) 187

Rare Earths
Partitioning of uranium and rare earth elements in Synroc: effect of impurities, metal additive, and waste loading, G.R. Lumpkin, K.L. Smith and M.G. Blackford 224 (1995) 31

Reprocessing
Kinetic study on dissolution of UO_2 powders in nitric acid, Y. Ikeda, Y. Yasuike, K. Nishimura, S. Hasegawa and Y. Takashima 224 (1995) 266

Segregation
Quantitative studies of irradiation-induced segregation and grain boundary migration in Fe–Cr–Ni alloy, S. Watanabe, N. Sakaguchi, N. Hashimoto and H. Takahashi 224 (1995) 158

Silicon and Silicon Compounds
Effect of deposition temperature on the properties of pyrolytic SiC, S.J. Xu, J.G. Zhou, B. Yang and B.Z. Zhang 224 (1995) 12
Improvement in oxidation resistance of the nuclear graphite by reaction-coated SiC coating, T. Chunhe and G. Jie 224 (1995) 103

Steels, Austenitic
Formation of $NaCrO_2$ in sodium systems of fast reactors and its consequence on the carbon potential, S. Rajendran Pillai, H.S. Khatak and J.B. Gnanamoorthy 224 (1995) 17
The effect of hold-times on the fatigue life of 20% cold-worked Type 316L stainless steel under deuteron irradiation, R. Scholz 224 (1995) 311

Steels, Ferritic
Formation of $NaCrO_2$ in sodium systems of fast reactors and its consequence on the carbon potential, S. Rajendran Pillai, H.S. Khatak and J.B. Gnanamoorthy 224 (1995) 17

Surface Effects
Cu/Li alloys: Conditions for their application in fusion reactors – focussing on the interaction of segregation and sputtering phenomena, B. Baretzky, W. Eckstein and R.P. Schorn 224 (1995) 50

Swelling
316 stainless steel cavity swelling in a PWR, J.P. Foster, D.L. Porter, D.L. Harrod, T.R. Mager and M.G. Burke 224 (1995) 207

Theory and Modelling
Quantitative studies of irradiation-induced segregation and grain boundary migration in Fe–Cr–Ni alloy, S. Watanabe, N. Sakaguchi, N. Hashimoto and H. Takahashi 224 (1995) 158
Comments on "A theory of the resistance of Zircaloy to uniform corrosion" by B. Hutchinson and B. Lehtinen, J. Nucl. Mater. 217 (1994) 243–249, B. Cox 224 (1995) 192
Authors' reply to Comments on "A theory of the resistance of Zircaloy to uniform corrosion", B. Hutchinson and B. Lehtinen 224 (1995) 195
Interpretation of laboratory crucible experiments on UO_2 dissolution by liquid zirconium, D.R. Olander 224 (1995) 254
Modelling of modulated gas flow through solid membranes under surface limited conditions, A.K. Altunoglu and N.St.J. Braithwaite 224 (1995) 273

Numerical and experimental determination of metallic solubilities in liquid lithium, lithium-containing nonmetallic impurities, lead and lead–lithium eutectic, I.E. Lyublinski, V.A. Evtikhin, V.Yu. Pankratov and V.P. Krasin 224 (1995) 288

Thermal Reactors

316 stainless steel cavity swelling in a PWR, J.P. Foster, D.L. Porter, D.L. Harrod, T.R. Mager and M.G. Burke 224 (1995) 207

Thermodynamic Properties

Formation of $NaCrO_2$ in sodium systems of fast reactors and its consequence on the carbon potential, S. Rajendran Pillai, H.S. Khatak and J.B. Gnanamoorthy 224 (1995) 17

Numerical and experimental determination of metallic solubilities in liquid lithium, lithium-containing nonmetallic impurities, lead and lead–lithium eutectic, I.E. Lyublinski, V.A. Evtikhin, V.Yu. Pankratov and V.P. Krasin 224 (1995) 288

Titanium, Titanium Alloys and Compounds

Pitting resistance and mechanism of TiN-coated Inconel 600 in 100°C NaCl solution, C.B. In, Y.I. Kim, W.W. Kim, J.S. Kim, S.S. Chun and W.J. Lee 224 (1995) 71

Tritium and Tritides

In-situ tritium release (CORELLI-2 experiment) and ex-reactor ionic conductivity of substoichiometric $LiAlO_2$ breeder ceramics, F. Alessandrini, C. Alvani, S. Casadio, M.R. Mancini and C.A. Nannetti 224 (1995) 236

Uranium, Uranium Alloys and Compounds

Surface studies on uranium monocarbide using XPS and SIMS, R. Asuvathraman, S. Rajagopalan, K. Ananthasivan, C.K. Mathews and R.M. Mallya 224 (1995) 25

Improvement of multi-jet low pressure impactor for high collection efficiency of UF_5 in the molecular laser isotope separation of uranium, Y. Kuga, B. Jurcik, S. Satooka and K. Takeuchi 224 (1995) 43

Characterization of ceramic powder compacts, K. Yanai, S. Ishimoto, T. Kubo, K. Ito, T. Ishikawa and H. Hayashi 224 (1995) 79

Fission product release from ZrC-coated fuel particles during postirradiation heating at 1600°C, K. Minato, T. Ogawa, K. Fukuda, H. Nabielek, H. Sekino, Y. Nozawa and I. Takahashi 224 (1995) 85

Interpretation of laboratory crucible experiments on UO_2 dissolution by liquid zirconium, D.R. Olander 224 (1995) 254

Kinetic study on dissolution of UO_2 powders in nitric acid, Y. Ikeda, Y. Yasuike, K. Nishimura, S. Hasegawa and Y. Takashima 224 (1995) 266

Injection casting of U–Zr–Mn, surrogate alloy for U–Pu–Zr–Am–Np, C.L. Trybus 224 (1995) 305

Wastes

Partitioning of uranium and rare earth elements in Synroc: effect of impurities, metal additive, and waste loading, G.R. Lumpkin, K.L. Smith and M.G. Blackford 224 (1995) 31

Corrosion behaviors during the iron removal process for chemical cleaning of nuclear steam generators, D.H. Hur, H.S. Chung and U.C. Kim 224 (1995) 179

Zirconium, Zirconium Alloys and Compounds

Fission product release from ZrC-coated fuel particles during postirradiation heating at 1600°C, K. Minato, T. Ogawa, K. Fukuda, H. Nabielek, H. Sekino, Y. Nozawa and I. Takahashi 224 (1995) 85

The distribution of Nb and Fe in a Zr–2.5 wt% Nb alloy, before and after irradiation, V. Perovic, A. Perovic, G.C. Weatherly and G.R. Purdy 224 (1995) 93

Microstructural study of oxide layers formed on Zircaloy-4 in autoclave and in reactor. Part I: Impact of irradiation on the microstructure of the zirconia layer, X. Iltis, F. Lefebvre and C. Lemaignan 224 (1995) 109

Microstructural study of oxide layers formed on Zircaloy-4 in autoclave and in reactor. Part II: Impact of the chemical evolution of intermetallic precipitates on their zirconia environment, X. Iltis, F. Lefebvre and C. Lemaignan 224 (1995) 121

Metastability of the β-phase in Zr-rich Zr–Nb alloys, G.K. Dey, R.N. Singh, R. Tewari, D. Srivastava and S. Banerjee 224 (1995) 146

Transient effects of lithium hydroxide and boric acid on Zircaloy corrosion, B. Cox and C. Wu 224 (1995) 169

Comments on "A theory of the resistance of Zircaloy to uniform corrosion" by B. Hutchinson and B. Lehtinen, J. Nucl. Mater. 217 (1994) 243–249, B. Cox 224 (1995) 192

Authors' reply to Comments on "A theory of the resistance of Zircaloy to uniform corrosion", B. Hutchinson and B. Lehtinen 224 (1995) 195

Dynamical diffusion model to simulate the oxide crystallization and grain growth during oxidation of zirconium at 573 and 623 K, E.A. García 224 (1995) 299

Propagation of stress corrosion cracks in Zr–1% Nb claddings, Yu.K. Bibilashvily, Yu.N. Dolgov, B.I. Nesterov and V.V. Novikov 224 (1995) 307